Catalyzing teacher inquiry with the PERTS survey

How a community of teachers at Mineola Middle School used a survey of social and emotional learning to foster student engagement

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Mineola School District needed a way to understand if student engagement efforts were actually working.

In 2017, Mineola Unified School District, a K–12 district in Long Island, New York, began a journey to become a “growth mindset district.” Since then, district leaders and teachers have deliberately worked to create a culture in which students feel empowered to take on challenges in the classroom, recognize mistakes as part of the learning process, and engage in deliberate practice and goal setting to improve. But while staff were passionate about this work, the district realized it needed a way to better understand if students were experiencing the learning conditions that would support this shift toward a growth mindset.

Learning Specialist and district instructional leader Jenn Maichin has spearheaded the district’s growth mindset efforts. Jenn is driven by a career-long mission to build students’ agency and intrinsic motivation, a passion that has developed throughout her 25 years as a special education teacher in Mineola. Jenn had discovered PERTS (Project

ABOUT THE PERTS COPilot STUDENT SURVEY

The PERTS Copilot Student Survey is a quick student survey (approximately 5–10 minutes to administer) that measures nine learning conditions that matter for student engagement and academic success.

Primary Learning Conditions:
- Affirming Identities
- Classroom Community
- Feedback for Growth
- Meaningful Work
- Student Voice
- Teacher Caring

Additional Learning Conditions:
- Learning Goals
- Supportive Teaching
- Well-Organized Class

Teachers receive a data report the Monday following survey administration. The PERTS platform includes a library of research-backed strategies to cultivate each learning condition along with resources to help teachers engage in collaborative cycles of inquiry around improving learning conditions. For more information, visit perts.net/elevate

1 In the 2019/20 school year, Mineola Unified School District enrolled 2,790 students. The three largest racial/ethnic subgroups for students were White (51%), Hispanic/Latino (31%), and Asian/Pacific Islander/Native Hawaiian (13%). Eleven percent of students were English Language Learners and 32 percent were economically disadvantaged (New York State Education Department).
for Education Research that Scales) and the PERTS student survey during her time as a classroom teacher, during which she drew on PERTS’ rich array of resources to apply insights from learning science to support student engagement in her own classroom.

**Supporting teachers’ growth mindset work called for professional development that was teacher centered, inquiry driven, and imbued with norms of trust.**

As Jenn investigated the potential of PERTS to support Mineola’s growth mindset efforts, district leaders were simultaneously working to shift the district’s professional development approach to incorporate teacher-driven learning and teacher choice. PERTS could be a promising opportunity to bring the district’s new vision for professional development to life: the PERTS survey is research informed, relevant across grades and subjects, and tied to the district’s larger growth-mindset initiative. Critically, the survey is a light lift to administer and is accompanied by a user-friendly platform, clear and timely data reports, and a library of resources and strategies to help teachers engage with the survey data.

With the support of district leadership, Jenn decided to pilot a series of inquiry cycles around the PERTS survey at Mineola Middle School. A cross-subject and cross-grade team of 11 teachers opted into the opportunity. The team would meet approximately once a month to discuss PERTS survey data and exchange ideas. Jenn planned to facilitate sessions and support the teacher team to gradually take on more leadership as the semester progressed.

Most of the participating teachers had co-taught with Jenn in the past. Their relationships to Jenn helped teachers make the initial leap into the new professional development format, which was a departure from what they were used to. Jenn recalls, “I had to just say, ‘Trust me...I got you,’ because this model was going to be a shift from traditional ‘sit-and-learn’ professional development models. We were building this together. We had PERTS as a structure and student engagement as the objective, but the process would be owned by the teachers.”
Both Jenn and the participating teachers viewed voluntary participation in PERTS as a supporting factor in the success of the pilot given the high levels of engagement and openness to collecting and discussing survey data that PERTS would entail. One 7th grade math teacher stressed:

[Jenn] made us aware that we would be vulnerable in this experience. We think it’s important for educators to understand that if you choose to do this and you want to collaborate with other teachers and staff members, are you open to having others see the data that comes in? Are you comfortable sharing if not all of the kids feel loved in your room or not all of the kids in your class feel challenged or feel like the math is meaningful?

Orienting teachers to the PERTS survey meant giving teachers permission to adopt a growth mindset toward their own work and learning.

In addition to orienting teachers to the research behind PERTS and the basics of the PERTS website and survey platform, Jenn used the first professional development session to prompt teachers to adopt a growth mindset toward their own work. “We as teachers have learned to
teach our students the value of making mistakes, failing forward, and letting learning be messy. But oftentimes we have difficulty with this ourselves,” Jenn explained. “We needed to start with giving ourselves that permission.” This included the necessity of embracing ambiguity: “The design thinking world thrives on embracing ambiguity, so I took a page from their book,” said Jenn. “We began the first session discussing our feelings about ambiguity and how we might reframe those feelings to actually embrace the ambiguity.”

Although Jenn was intentional about setting up teachers with a growth mindset from the beginning, she also knew that the real shifts in teachers’ thinking would come gradually as they engaged with the PERTS survey data. “Instead of front-loading it so that people can reject it, I practice [growth mindset] and put it into the presentations that I make and the language that I speak, and plant the seeds, little by little,” Jenn said. “And then they go, ‘Oh, there it is. Oh, I get it now.’”

Teachers were intentional in introducing the PERTS survey to their students.

Following the initial orientation session, the teachers prepared their students for the survey. The Mineola teachers were intentional in introducing the survey to their students, either adapting and personalizing the survey introduction letter templates available on the PERTS website or having conversations with students to explain the intent behind the surveys. The teachers appreciated the resources that PERTS provided to introduce and cultivate authentic student engagement with the survey. “I felt that [PERTS] created such a nice way to introduce it to the students,” one teacher noted. “They had a welcome letter already created that you can use to share with the students, as well as families, as to what the program was going to be.” The teachers emphasized to students that they were looking for honest answers and stressed the anonymity of the data.
Implementing PERTS within learning cycles gave a rhythm and structure to teachers’ inquiry.

Teachers administered the PERTS survey approximately once every four weeks as part of their cycles of inquiry and action. Teachers started a cycle by collecting feedback from their students through the survey to understand how students were experiencing learning conditions. Following survey administration, teachers accessed a confidential report with disaggregated data on their class as well as aggregated data for the group of participating teachers.

The Mineola team administered surveys, analyzed data, discussed change ideas, and implemented strategies in the rhythm of the PERTS-suggested learning cycles.

Teachers appreciated PERTS’ easy administration and timely and accessible data reports.

The teachers appreciated the user-friendliness of PERTS. “I felt that anytime I wanted to find a survey, it was super easy and convenient,” a teacher described. “I would share the
web link with the students — I would either write it on the board, or I could easily email it to them — and all they had to do was sign in using their email address.”

To engage students with the survey, teachers were careful to frame the intent behind the survey at each administration. Describing how she messaged the intent behind the survey, one teacher explained, “I just set the atmosphere of, ‘I really appreciate this time and your feedback. This will help me ensure that we have a more comfortable learning environment. I want to make sure I do everything I can to make you feel happy and safe and challenged in this room. So, none of your feedback will hurt my feelings.’ I just gave them a little speech every time, gave the survey, and then it was done.”

Teachers were able to access individual data reports on the PERTS website the Monday following survey administration. The teachers appreciated the easy-to-access format of the reports. They also appreciated how the reports’ combination of their individual and aggregated team data displays encouraged them to raise both their own scores and the group’s score. “At first I thought it was going to be super overwhelming,” one teacher remembered, “[but it was] super easy. Just give the kids a website link, and then you’d go to the website and you would be able to get your data. All of the information from the kids would upload into a very easy teacher friendly manner.”

SNAPSHOT OF PERTS STRATEGIES IN ACTION: FEEDBACK FOR GROWTH

**Challenge:** The comparatively low responses on the “Feedback for Growth” learning condition stood out as the team reviewed their first round of survey data.

**Investigation:** The team hypothesized that some students might see feedback as a threat or that students might not understand what feedback for growth looks like. How could teachers familiarize students with the concept of feedback for growth?

**Strategy:** Over the next two inquiry sessions, the team created lessons that helped students understand why feedback is important to learning. They also tested the “stars” (areas in which students are doing well) and “steps” (what students will do to continue to get better) strategy from the PERTS library of resources.

“We knew as a group that we were giving [students] feedback all along, but [realized] they might not be aware of it. So we had to stop to identify for middle schoolers, ‘What is feedback?’”

For more information on what it was like to identify and test these change ideas, see PERTS Strategies in Action: Supporting students with feedback for growth.
Supporting teachers to reflect on areas for growth involved embracing discomfort, making it okay to fail, and building an encouraging community.

While setting up and implementing the PERTS survey was relatively simple, the hard part, stressed the teachers, was receiving data that was less positive.
Jenn and the teacher team underscored that it was helpful to have a facilitator to support them through the rough patches. “You have to allow time for the struggle and to ask a lot of questions,” Jenn emphasized. “Giving people the permission to fail and not be perfect, especially teachers, is really important. And continuously reminding them of that.”

PERTS also pushed teachers to adopt the district’s growth mindset orientation in their own practice. As one teacher reflected:

> I feel like my district is big about teaching the kids to feel uncomfortable in the learning... and then as adults, when you put yourself in that position, you’re kind of like, “Wait, I don’t really like this!” which is so telling for my own personal growth, what I can work on.

While confronting their own students’ data pushed teachers out of their comfort zones, sharing that data with their colleagues could feel like an even bigger challenge. The teachers themselves worked to create a supportive atmosphere in which they could be open with their colleagues, starting with some norms early on. “We each shared, and everyone was super comforting and encouraging,” explained one teacher. “We set the stage first before we started... no one was putting anyone down. We don’t have a culture like that. Everyone is pretty encouraging and empathetic.” Another teacher emphasized, “We were in a group that was very comfortable with each other. There’s no judgments cast or, ‘Oh my God, her percentage was higher than my percentage.’ So there wasn’t that nervousness or feeling like, ‘Oh, I’m going to look bad.’...We’re past that.”

At first, I was nervous. But then I just said, “Wait a second, this is what this professional development is about. I chose to be here. Of course, I want to make this better. So, I have to talk about it.”

Over time, teachers became the facilitators and drivers of their own learning.

After digesting their data reports, teachers focused on identifying one or two simple changes they could implement right away, asking “What can we create that we can start tomorrow?” Teachers took advantage of the PERTS library of resources, which contains strategies related to improving the specific learning conditions asked about on the survey. “We all agreed to use that resource because we were trying to connect it with the
PERTS survey to see if that was going to change our results. So, we wanted to keep that consistent,” explained one teacher. But while teachers all agreed to focus on the same general change idea, they adapted that idea to fit their own classroom context. “Everyone had a different way of approaching their kids,” noted one teacher. This process sparked a creative exchange of ideas when the teachers came back together to share how their approaches to a new strategy had played out in the classroom. “Oh, that was a great idea. I’m going to try that next time!” was a common exclamation in the PERTS professional development sessions, teachers recalled.

As the facilitator for the group, Jenn helped the teacher team stay focused on action, encouraging them to adopt the saying, “So what are you going to do about it?” when they encountered challenging data. While Jenn’s leadership started the teachers off on the right foot and pushed them toward inquiry and action, it was not long before the teachers were taking the lead in discussing data and identifying potential strategies to try. Over time, said Jenn, “it became less about me, more about them. The ownership became theirs. They became the facilitators and drivers of the process.”

Never an end point: Mineola looks forward to expanding the PERTS opportunity throughout the district.

Jenn is optimistic when she thinks about what is next for PERTS and Mineola as more teachers and leaders start to see the potential of PERTS to bring the district’s
growth-mindset work to life. “One piece of advice that I would give to anybody who is implementing PERTS,” she stressed, “is to never say that there’s an end point.”

In the 2020/21 school year, Jenn worked to incorporate PERTS into the tenure program’s inquiry cycles for veteran teachers. She also opened the opportunity to several beginning teachers who used PERTS independently, noting that updates to the PERTS platform and professional learning supports were making it more feasible for teachers to use PERTS outside of a formal support structure. In the summer of 2021, district, middle, and high school leadership discussed opportunities for more teachers to conduct inquiry cycles using PERTS as part of their professional development. Jenn is looking forward to other teacher leaders having the opportunity to drive the work. “It’s really hard to get anybody to do anything that they feel is not valuable. So, I need to get a bunch of teachers to do this, to find it valuable, and then let it go from there. That’s my next challenge.”

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PERTS Strategies in Action: In-depth stories of improvement in practice
Supporting Students with Feedback for Growth

As the Mineola teachers reviewed their first round of survey data, the comparatively low responses on the “Feedback for Growth” learning condition stood out.

Pondering the Feedback for Growth data together, the team reflected on why feedback responses were low. They hypothesized that some students might see feedback as a threat or that students might not understand what feedback for growth actually looks like (when one teacher asked her students, they described feedback as “when a teacher tells you what you did wrong on a test”). The teachers’ reflections led to the realization that, as a precursor to improving student perceptions of feedback, the team would need to work with students to communicate the intention behind feedback for growth. “We knew as a group that we were giving students feedback all along, but [realized] they might not be aware of it,” explained one teacher. “So, we had to stop and identify for middle schoolers, ‘What is feedback?’”

The teachers used the next two inquiry sessions to create lessons that would help students understand why feedback is important and a framework for delivering that feedback.

As the teachers perused the PERTS online library of strategies related to the Feedback for Growth learning condition, the team identified the “stars and steps” strategy as a promising change idea. In this strategy, stars are the areas in which students are doing well, and steps are the ways students will work to continue to get better. “The strategy sounded interesting to us and it was tangible,” explained one teacher. Jenn noted that identifying a tangible strategy to collectively try was meaningful because it empowered the teachers to do something about the data.

After deliberately introducing students to the concept of Feedback for Growth, teachers implemented the stars and steps strategy with their students, adapting their approach to fit their own classrooms and needs.

**FEEDBACK FOR GROWTH SURVEY MEASURES:**

- “In this class, it is okay to make mistakes because we can learn from them.”
- “This teacher lets me know they believe I can do well in this class.”
- “I get specific suggestions about how to improve my work.”
This allowed for a rich exchange of ideas when the teachers gathered again at their next professional development session. As one teacher explained:

*I felt like Jenn was just the facilitator of the conversation and we, as a group, came up with ideas together and said, “Oh yeah, I like that too. I want to try that.” It wasn’t “You should do this, you should do that.” It was really up to us what we wanted to do.*

Another teacher added:

*“Some of us [used it] to give feedback over assessment, but it didn’t have to be a big test...I do a math challenge question every day and I used it for that one little problem you look at. So, we just all shared different ways we were using it, doing it.”*  

Iterations of the stars and steps strategy included writing feedback on sticky notes for students, having students give themselves feedback on their own work and then talking through it with a teacher, and using a seating chart to track which students had received “star” and “step” feedback during a lesson. This last iteration led to the realization that not all students were receiving feedback as equitably as the teachers had intended and that those who received feedback more frequently might feel singled out.

*As teachers implemented this strategy, they observed that students were becoming more receptive to feedback and that emphasizing “stars” made students more open to discussing “steps.”*

One teacher who uses Khan Academy (an organization that offers free online courses in math and other academic subjects) in her math class had been working to get students to take advantage of the “tips” feature in the Khan Academy courses. Students had been reluctant to use tips because doing so would prevent them from receiving full points on the related question. After working on the concept of feedback for growth with her class, the teacher noticed students were more likely to take advantage of Khan Academy’s tips to leverage an opportunity to grow and were less concerned with whether they would miss out on points.

When teachers implemented the survey a second time a month later, survey results indicated their work was shifting student perceptions, which motivated teachers to continue sharing, testing, and refining their feedback-for-growth strategies. After the
COVID-19 pandemic forced a shift to virtual learning, the teachers were able to see that survey results on feedback and teacher caring had dropped, spurring teachers to adapt their strategies to meet student needs in a distance context.

The teachers’ decision to focus on feedback for growth was inspired, in part, by the district’s focus on growth mindset. The teachers were excited to have a tangible way to put growth-mindset research into practice in their math instruction. As one teacher reflected:

*Feedback was important to go along with this idea that all kids have the ability to change their intelligence. When they’re struggling or facing an obstacle, we’re there to provide them with the feedback, those next steps: “What strategy will you try this time?” They could see the change in their learning, even though it was hard and it could take time, but they do see that development with the math.*

Teacher team’s next steps: After noticing the lower responses on the “feedback for growth” survey items, the team of pilot teachers developed this set of next steps for discussing survey results with students and introducing students to the concept of feedback for growth.
Introducing feedback for growth: Teachers first worked to introduce the concept of feedback for growth to their students.

Teacher reflections: After making a collective decision to try the “stars and steps” strategy in the previous professional development session, teachers used the next session to reflect on what went well and what else they could try in their implementation of the strategy.
Examples of feedback for growth: A teacher provides students with stars and steps feedback on an assignment (left). Some teachers modeled soliciting feedback for growth by asking for feedback on their instruction from their students (right).
Increasing Student Perceptions of Teacher Caring

When teachers received the first round of survey data, negative student responses to the “Teacher Caring” items hit them on an emotional level.

“We kept saying, ‘Well, why don’t they all feel 100 percent?’ So, it made us motivated to really try to get to each student,” explained one teacher. Another added, “We all feel that we care about our students and that we’re good teachers. But to receive that authentic feedback from your own students is very eye opening. It allows you to really look at that data and figure out, ‘Well what are we really going to do about this?’”

Despite what seemed like a complex and overwhelming problem, the teachers agreed to focus on one simple strategy to shift students’ perceptions of teacher caring: greeting each student by name every day.

As she reflected on the impact of this strategy, one teacher recalled:

It was something so little but really was important to do. At first, it really took effort, but then it became more natural, and you could really see a difference in the kids coming in and smiling, [making] eye contact, and they looked for it. When we gave the survey again, we could see the improvement in the percentage of those kids that felt comfortable in the classroom and felt wanted and accepted.

Teachers saw a clear connection between teacher caring and the academic mindsets they were encouraging students to adopt in their math class.

“If you make these personal connections and they really feel that you care about them — not just as a student in your class but as a person — they’re more willing to take those risks to learn and to ask for help,” stressed a math teacher.
Appendix: Supporting Engagement During the COVID-19 Pandemic
A change in plans

On April 21, 2020, nearly a month into distance learning, the Mineola Engagement Project team gathered on Zoom for a strategy meeting. The team had last administered the survey during the week of March 24, just one week into the COVID-19 stay-at-home order. That now felt like a lifetime away. The team needed to decide what their work together would look like in this drastically new and uncertain environment, and when — or if — they would administer a fourth round of the PERTS survey in May as originally planned.

But as distance learning stretched into April with no clear end in sight, teachers were wrestling with the relevance of continuing the survey. Would the students still see value in a fourth survey, or would it just feel like another thing to do? And how could the group possibly compare previous rounds of survey data with data collected in this drastically altered environment? Thinking back to the team’s pre-pandemic focus on feedback for growth, one teacher wondered, “I don’t know how much they need feedback from me about a percent problem. They need emotional support.”

What does it mean to support student engagement during a pandemic?

Once the team had a chance to share their frustrations around supporting students during the distance-learning period, Jenn steered the group back to what the members could control. The heart of their work had always been deepening student engagement. The PERTS survey items were not only content agnostic, they were context agnostic. Just because academics were not happening as usual did not make the survey items less relevant, she suggested. Jenn also lowered the stakes: “We’re just going to do it to see what the data look like,” she assured the group. “Things have completely changed, so the data might not necessarily be the driver of what we do, but it may help us focus on things. If anything, it will be interesting to see what happens.”

“This will be the second time we’re giving the survey from home, so it will be interesting to see what changes,” offered one teacher, shifting the group’s conversation back toward inquiry. “We’re going backwards in terms of engagement,” another teacher reflected. “We fell into a quick hello, spit out the information, then drop off. And surprise, [students’] motivation fell off.” A third teacher floated the idea that, far from feeling irrelevant to students, the PERTS survey might help students recognize that “their emotional well-being is a priority to us.”
Focusing on student well-being and building a sense of connection

A new survey administration window for late May 2020 was added to the calendar, and the teachers quickly transitioned back into their now familiar routine of investigating a problem and brainstorming strategies. Teachers began sharing informal data about their students’ engagement levels. “When they’re saying they’re unmotivated, how can we help them? Maybe we should be looking into meaningful work, maybe that’s what’s missing,” posited one teacher. Some teachers suggested that keeping engagement up in a distance context and supporting the emotional well-being of students needed to be a priority: Rather than checking in with feedback to directly support students’ academics, they could shift their focus to checking in on students’ emotional well-being and engagement levels.

Strategy: Using check-in prompts with students

Together, the group decided they would create a list of “check-in” prompts they could administer to students using Google Forms. “When you reach out, you’re getting an understanding of where they are,” Jenn encouraged the group. “And this generates a follow-up question...then what you [all] do might be different. But can we start with a similar prompt, spend a week collecting data, then say, ‘This is what we see’?”

As the teachers considered what check-in questions to use, they acknowledged that they already knew many students were feeling disengaged. What, then, could they ask that would yield new insights about what students needed to feel more engaged, they wondered? What questions would foster a greater sense of connection between students and teachers? What information would help teachers empathize with what students were going through? The teachers ultimately developed a list of 10 questions, including the following:

- What do you miss about being at school?
- What’s positive about distance learning? (Some students were finding positives in distance learning, and the teachers wanted to know how to leverage that.)
- If you could change one thing about distance learning, what would you change?
- If you could change one thing about your home experience, what would that be?
- Share one thing you did over the last few days.
- What’s the first thing you want to do after the pandemic?
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